Table 4.7-1. National Ambient Air Quality Standards

			National Ambient Air Quality Standard		
Pollutant	**Symbol**	**Averaging Time**	**Parts Per Million**	**Micrograms Per Cubic Meter**	**Violation Criteria**
Ozone	0_3	1 hour	0.12	235	If exceeded on more than 3 days in a 3-year period
		8 hours	0.08	157	If exceeded by the mean of annual 4th highest daily values for a 3-year period
Carbon Monoxide	CO	8-hours	9	10,000	If exceeded on more than 1 day per year
		1-hour	35	40,000	If exceeded on more than 1 day per year
Inhalable Particulate Matter	PM_{10}	Annual Arithmetic Mean	—	50	If exceeded as a 3-year single station average
		24 hours	—	150	If exceeded by the mean of annual 99th percentile values over 3 years
Fine Particulate Matter	$PM_{2.5}$	Annual Arithmetic Mean	—	15.0	If exceeded as a 3-year spatial average of data from designated stations
		24 hours	—	65	If exceeded by the mean of annual 98th percentile values over 3 years
Nitrogen Dioxide	NO_2	Annual Average	0.053	100	If exceeded
Sulfur Dioxide	SO_2	Annual Average	0.03	80	If exceeded
		24 hours	0.14	365	If exceeded on more than 1 day per year
		3 hours	0.5	1,300	If exceeded on more than 1 day per year
Lead Particles (TSP Sampler)	Pb	Calendar Quarter	—	1.5	If exceeded

Notes: All standards except the national PM_{10} and $PM_{2.5}$ standards are based on measurements corrected to 25 degrees C and 1 atmosphere pressure. The national PM_{10} and $PM_{2.5}$ standards are based on direct flow volume data without correction to standard temperature and pressure.
Decimal places shown for standards reflect the rounding precision used for evaluation compliance. Except for the 3-hour sulfur dioxide standard, the national standards shown are the primary (health effects) standards. The national 3-hour sulfur dioxide standard is secondary (welfare effects) standard. EPA adopted new ozone and particulate matter standards on July 18, 1997. The new standards have been challenged in court, and final appeals have not been decided. Thus, implementation of the new standards is on hold and remain under court review. Previous national PM_{10} standards (which had different violation criteria than the September 1997 standards) will remain in effect for existing PM_{10} nonattainment areas until EPA takes actions required by Section 172(e) of the *Clean Air Act* or approves emission control programs for the relevant PM_{10} state implementation plan. Violation criteria for all standards except the national annual standard for $PM_{2.5}$ are applied to data from individual monitoring sites. Violation criteria for the national annual standard for $PM_{2.5}$ are applied to a spatial average of data from one or more community-oriented monitoring sites representative of exposures at neighborhood or larger spatial scales (40 CFR Part 58). The "10" in PM_{10} and the "2.5" in $PM_{2.5}$ are not particle size limits; these numbers identify the particle size class (aerodynamic equivalent diameters in microns) collected with 50% mass efficiency by certified sampling equipment. The maximum particle size collected by PM_{10} samplers is about 50 microns aerodynamic equivalent diameter; the maximum particle size collected by $PM_{2.5}$ samplers is about 6 microns aerodynamic equivalent diameter.
TSP = total suspended particulates.
Sources: 40 CFR Parts 50, 53, and 58.